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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,726	06/26/2003	Pierre-Marc Allemand	2002P20105US01	5818
7590 01/12/2006 EPPING, HERMANN, FISCHER Ridlerstrasse 55 Munich, 80339 GERMANY			EXAMINER ROY, SIKHA	
			ART UNIT 2879	PAPER NUMBER

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/606,726	Applicant(s) ALLEMAND, PIERRE-MARC	
	Examiner Sikha Roy	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Amendment, filed on October 31, 2005 has been entered and is acknowledged by the Examiner.

Cancellation of claims 1-9 and 13-17 has been entered.

New claims 25-38 have been entered.

The new drawing of Fig. 2A submitted on October 31, 2005 has been entered and is approved by the Examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23,34 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23, 34 and 38 contains the trademark/trade name Elvax® resin. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or

trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe the inert material in the getter composition and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 22-31 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,226,890 to Boroson et al.

Regarding claim 22 Boroson discloses (Fig. 3B, 4 column 6 lines 17-22, 59-67, column 7 lines 5-7) a getter composition 50 comprising a reactive material disposed in an encapsulated device the reactive material comprising desiccant particles 54 of alkaline earth metal oxides (calcium oxide, barium oxide in Example 1) and an inert material (binder) 52 disposed in the encapsulated device which can be cured to a solid by heating and hence adapted to respond to energy input by phase change.

Regarding claim 23 Boroson discloses (column 7 lines 8-11,32-37) the inert material (binder) are moisture-permeable radiation-curable acrylates.

Regarding claims 24 and 25 Boroson discloses (column 6 lines 17-22) the inert material comprises a binder 52 and the reactive material 54 (desiccant particles) are dispersed and hence mixed in the binder.

Regarding claim 26 Boroson discloses (column 6 lines 46-51) the weight fraction of the reactive material (desiccant) in the inert material (binder) is in a range of 10% to 90%.

Regarding claims 27 and 28 Boroson discloses (column 6 lines 41,42, claim 21) the reactive material (desiccant particles) has particle size ranging from 0.1 to about 200 micrometers.

Regarding claims 29 and 30 Boroson discloses (Fig. 4 column 6 lines 4-34) the encapsulated device is an optoelectronic device, an organic light emitting device.

Regarding claim 31 Boroson discloses (Fig. 3B column 4 lines 35-54) the reactive material is in a layer of thickness t .

Claims 35, 36 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,737,176 to Otsuki et al.

Regarding claim 35 Otsuki discloses (column 4 lines 8-23) a getter structure (desiccating layer) disposed in an encapsulated organic EL device comprising a layer of reactive material (desiccant including barium oxide, calcium oxide) and a layer of inert material (resin layer) disposed on the layer of reactive material. Otsuki further discloses

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the resin layer comprising photo-curable resin, adapted to respond to energy by phase change. This configuration provides the advantage of manufacturing the sheet containing the reactive material in advance and reduction of cost of manufacturing the device.

Regarding claim 36 Otsuki discloses the first layer of reactive material comprising desiccant including barium oxide, calcium oxide.

Regarding claim 38 Otsuki discloses (column 4 lines 31-37) the second layer of inert material comprising silicon-based resin, olefin-based resin.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,226,890 to Boroson.

Regarding claim 32, Boroson discloses the claimed invention except for the limitation of thickness of the layer in the range of 0.1 to 10 microns. It is noted that the thickness of the reactive material layer determines the amount of moisture vapor transmission rate and hence the amount of desiccation provided in the encapsulated device. It has been held that where the general conditions of a claim are disclosed in

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the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the thickness of the reactive material layer in the range 0.1 to 10 microns, for providing desired desiccation inside the organic EL device of Boroson, since optimization of workable ranges is considered within the skill of the art.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,226,890 to Boroson and further in view of U.S. Patent 6,112,888 to Sauro et al.

Regarding claim 33 Boroson does not explicitly disclose the inert material being wax.

Sauro in the same field of endeavor discloses (column 3 lines 37-40) use of polyethylene waxes as inert material. Sauro further teaches polyethylene waxes are preferred for applications requiring high speed application through small orifices.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use wax as inert material in the desiccating layer of Boroson as suggested by Sauro for specific packaging application such as the one requiring high speed application through small orifices.

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,226,890 to Boroson and further in view of U.S. Patent 6,967,640 to Albert et al.

Regarding claim 34 Boroson discloses acrylates, methacrylates but does not disclose using Elvax resin as inert material.

Albert in pertinent art discloses (column 9 lines 54-67) polymers such as Du Pont Elvax resins, polyacrylates, polymethacrylates are art recognized equivalents.

It would have been obvious to use Elvax resin as disclosed by Albert instead of methacrylates as inert material of Boroson because the two materials are art recognized equivalents.

Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,737,176 to Otsuki et al.

Regarding claim 37, Otsuki discloses the claimed invention except for the limitation of thickness of the first layer in the range of 0.1 to 10 microns. It is noted that the thickness of the reactive material layer is determined by the amount of moisture resistance and hence the amount of desiccation provided in the encapsulated device. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the thickness of the reactive material layer in the range 0.1 to 10 microns, for providing desired moisture resistance inside the organic EL device of Otsuki, since optimization of workable ranges is considered within the skill of the art.

Response to Arguments

Applicant's arguments with respect to claim 22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent Application Publication 2001/0033946 to Mashiko et al. discloses a getter composition in electroluminescent device with first layer of removing agent of alkaline earth metal oxides and another layer of fixing member of thermoplastic resin.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.R.

Sikha Roy
Patent Examiner
Art Unit 2879

Karabi Guharay